Exhibit C

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN FRANCISCO DIVISION

GOOGLE LLC, Plaintiff v. SONOS, INC., Defendant.	CASE NO. 3:20-cv-06754-WHA Related to CASE NO. 3:21-cv-07559-WHA

OPENING EXPERT REPORT OF DR. DAN SCHONFELD REGARDING U.S. PATENT NO. 10,848,885 AND U.S. PATENT NO. 10,469,966

be configured for synchronous playback of media when the second zone scene is invoked, wherein the third zone player is different than the second zone player;

based on the second request, i) causing creation of the second zone scene, ii) causing an indication of the second zone scene to be transmitted to the first zone player, and iii) causing storage of the second zone scene; displaying a representation of the first zone scene and a representation of the second zone scene; and while displaying the representation of the first zone scene and the representation of the second zone scene, receiving a third request to invoke the first zone scene; and

based on the third request, causing the first zone player to transition from operating in the standalone mode to operating in accordance with the first predefined grouping of zone players such that the first zone player is configured to coordinate with at least the second zone player to output media in synchrony with output of media by at least the second zone player.

D. Prosecution History

2. '885 Patent

72. I understand that the application underlying the '885 patent was filed on April 12, 2019. On July 5, 2019, the Examiner issued a non-final rejection holding that the claims were obvious over Yamaha DME Designer. 2019-07-05 Non-Final Rejection. While the Examiner found that DME did "not explicitly teach the inclusion, exclusion, etc. of particular enumerated first, second, etc. players of the set of available players to form, create, save, recall etc. a particular first, second, etc. grouping," the Examiner took "official notice that the grouping and sub-grouping of a constellation of audio players to include or disclude particular players from an operational set was well known in the art before the effective filing date of the instant invention and would have been an obvious inclusion." *Id.* at 3. The Examiner further found that "[t]he DME system enables the practice of the claimed subject matter without undue experimentation and as such grouping of

playback device and channels thereon would have been obvious as a matter of routine experimentation over the course of normal operation by the average skilled practitioner upon the DME interface to create, save and recall various configurations including and/or excluding the particular enumerated playback devices." *Id.* The Examiner noted in an Examiner-Initiated Interview Summary that DME did "appear to disclose the predetermined media with a similar degree of specificity" as the claims. 2019-07-05 Examiner Initiated Interview Summary.

73. The Applicant responded on August 23, 2019 making amendments to the claims and specification. The Applicant added to the specification that "the list of zones in the user interface 520 includes ALL the zones in the system, including the zones that are already grouped." 2019-08-23 Amendment/Req. Reconsideration After Non-Final Rejection at 2. The Applicant also added descriptions of Figures 5C and Figure 6, as well as the descriptions of Figure 7 and Figure 8. *Id.*

74. The Applicant amended the claims to (among other things) require a "standalone" mode where zone players are configured to play back media individually, that the standalone speaker "continues to operate in the standalone mode until" one of the "zone scenes has been selected for invocation," and that the standalone mode speaker "transitions" to play back media in synchrony. *Id.* at 4.

1. (Currently Amended) A first zone player ~~playback device~~ comprising:

a network interface that is configured to communicatively couple the first zone player to at least one data network;

one or more processors;

a non-transitory computer-readable medium; and

program instructions stored on the non-transitory computer-readable medium that, when executed by the one or more processors, cause the first zone player ~~playback device~~ to perform functions comprising:

while operating in a standalone mode in which the first zone player is configured to play back media individually in [[of]] a networked media playback system[[,]] comprising the first zone player and at least two other zone players:

(i) receiving, from a network device over a data network, a first indication that the first zone player has been added to a first zone scene comprising a first ~~preconfigured~~ predefined grouping of ~~zones~~ zone players including at least the first zone player and a second zone player that are to be configured for synchronous playback of media when the first zone scene is invoked; and

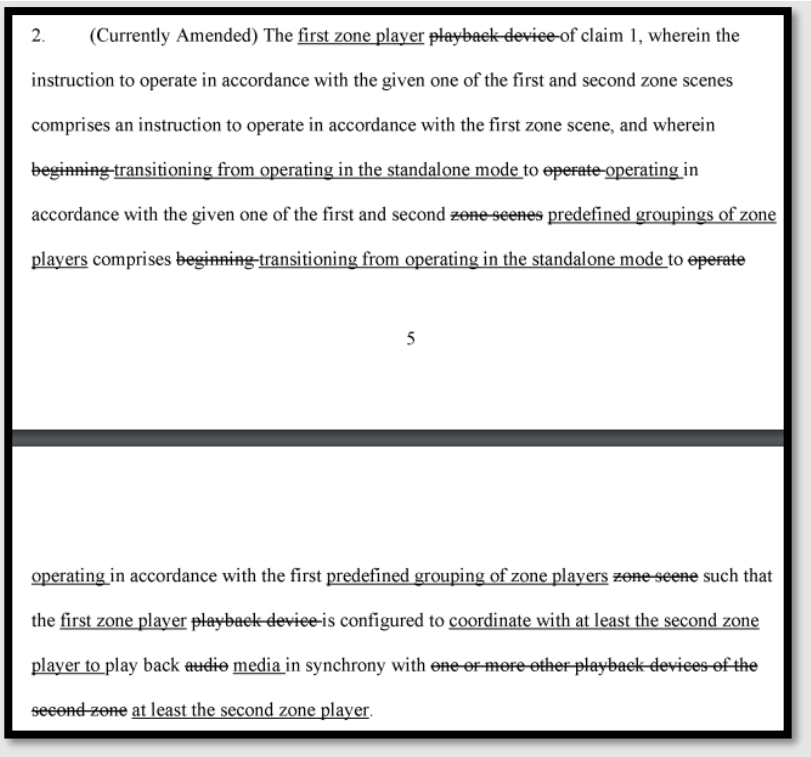
(ii) receiving, from the network device over the data network, a second indication that the first zone player has been added to a second zone scene comprising a second ~~preconfigured~~ predefined grouping of ~~zones~~ zone players including at least the first zone player and a third zone player that are to be configured for synchronous playback of media when the second zone scene is invoked, wherein the second zone player is different than the third zone player;

after receiving the first and second indications, continuing to operate in the standalone mode until a given one of the first and second zone scenes has been selected for invocation;

after [[a]] the given one of the first and second zone scenes has been selected for invocation, receiving, from the network device over the data network, an instruction to operate in accordance with [[the]] a given one of the first and second zone scenes respectively comprising a given one of the first and second predefined groupings of zone players; and

based on the instruction, ~~beginning~~ transitioning from operating in the standalone mode to ~~operate~~ operating in accordance with the given one of the first and second ~~zone scenes~~ predefined groupings of zone players such that the first zone player ~~playback device~~ is configured to coordinate with at least one other zone player in the given one of the first and second predefined groupings of zone players over a data network in order to play back ~~audio~~ media in synchrony with ~~one or more other playback devices in the media playback system~~ the at least one other zone player in the given one of the first and second predefined groupings of zone players.

75. The Applicant amended other claims as well, including amendments identifying "transitioning from operating in the standalone mode" and "coordinat[ing]" steps.



2. (Currently Amended) The first zone player ~~playback device~~ of claim 1, wherein the instruction to operate in accordance with the given one of the first and second zone scenes comprises an instruction to operate in accordance with the first zone scene, and wherein ~~beginning~~ transitioning from operating in the standalone mode to ~~operate~~ operating in accordance with the given one of the first and second ~~zone scenes~~ predefined groupings of zone players comprises ~~beginning~~ transitioning from operating in the standalone mode to ~~operate~~

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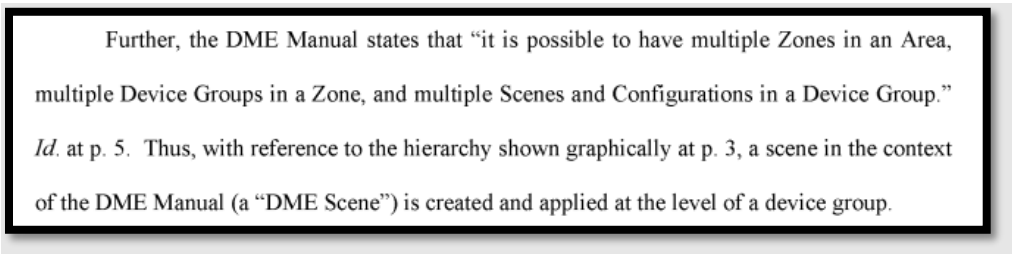
operating in accordance with the first predefined grouping of zone players ~~zone scene~~ such that the first zone player ~~playback device~~ is configured to coordinate with at least the second zone player to play back ~~audio~~ media in synchrony with ~~one or more other playback devices of the second zone~~ at least the second zone player.

Id. at 5-6.

76. The Applicant acknowledged that the DME manual disclosed scenes.



Further, the DME Manual states that "it is possible to have multiple Zones in an Area, multiple Device Groups in a Zone, and multiple Scenes and Configurations in a Device Group." *Id.* at p. 5. Thus, with reference to the hierarchy shown graphically at p. 3, a scene in the context of the DME Manual (a "DME Scene") is created and applied at the level of a device group.

Id. at 20.

77. The Applicant also attempted to distinguish the DME manual on the basis that the individual units "cannot be assigned to multiple device groups or overlapping device groups."

> However, individual devices in the DME system (i.e, individual DME units or SP2060 units) cannot be assigned to multiple device groups or overlapping device groups. "A zone can include up to 32 device groups, and all devices will belong to ***one*** of those groups. Click [Device Group Manager] in the [Tools] menu to open tile 'Device Group Manager' window, via which device groups can be changed as required." *Id.* at p. 281 (emphasis added). Thus, DME Scenes can be configured/stored/recalled within a given DME device group that is already established—but the DME Manual does ***not*** suggest that recalling a DME Scene can re-group individual devices into different DME device groups.

Id.

78. The Applicant also distinguished the Takemura reference on the basis that the players could not "belong[] to the plural zones in the same area"—*i.e.*, it did not allow overlapping groups.

> During the interview, the Examiner pointed to Figure 7 of Takemura and suggested that it may teach the elements found in Applicant's claims. However, Applicant has reviewed Takemura and respectfully submits that Takemura also does not teach the limitations that are missing from DME.
>
> For example, like the DME Manual, Takemura is clear that "one mixer engine never belongs to the plural zones in the same area." Takemura at [0091]. Similarly, Takemura teaches that a mixer engine E1 "stores only the current scene concerning the zone to which the engine E1 currently belongs since the engine E1 never belongs to the plural zones concurrently." *Id.* at [0124]. Further, Figure 6 of Takemura shows a data storage diagram ("stored on the PC side") that illustrates each zone in a given area having, as a subset of the data stored for the zone, its own scene data. Thus, consistent with the DME Manual, a "scene" in Takemura deals with component configuration(s) and parameter(s) within an established grouping of mixer engine(s), such as the group shown in Figure 4 of Takemura.

Id. at 21.

79. On January 27, 2020, the Examiner issued another non-final rejection based on double patenting over prior family members of the '885 patent.

80. In the August 19, 2020 notice of allowability, the Examiner stated:

> the prior art does not reasonably teach the subject matter of the independent claims. Particularly while DME operates to accomplish playback of selected media in synchrony on a selected set of first, second, etc. playback devices when a scene is invoked upon said set of players, DME does not allow for continuous output of media on a particular playback device and joining of the continuous output by a selected playback device or set thereof in synchrony with media currently playing back upon the particular playback device. That is, the prior art enables the selection of a device or group for synchronized playback of media, however the synchronization is the start of the process. Whereas invocation of a scene which adds a playback device or group thereof as claimed causes the added playback device(s) to join with a particular playback device currently playing media and output said media in synchrony with the particular playback device without a pause or interruption of the playing media nor any need for a user to further engage with playback controls of the playing media. The Bose teaches a system which allows for synchronous addition of media players to a playback system while delivering a playing media without interruption. Bose displays static groupings of media players attached as "rooms" and the rooms may be individually activated and individually configured for delivery of a synchronous media and/or grouped into a party mode where all rooms synchronously deliver a common media. As such Bose does not allow dynamic additions and subtractions such as the synchronous addition of a particular third media player and removal of a second media player in substantially real time by the selection of an appropriately configured scene, nor does Bose enable scene-wise storage of such diverse groupings of media players.

2019-09-09 Notice of Allowance.

81. After the notice of allowance, the Applicant submitted Figures 7 and 8, in response to a Notice to File Corrected Application Papers mailed on September 13, 2019. 2019-09-19 Drawings.

82. After a request for continued examination, the Examiner issued another non-final office action rejecting the application for double patenting "over claim 1-20 of U.S. Patent No. 9344206, over claim 1-33 of U.S. Patent No. 8483853, over claim 1-20 of U.S. Patent No. 8843228, and claim 1-33 of the 15/130919 application (PGPub 20160234615)." 2020-01-27 Non-Final Rejection.

83. The Applicant filed a terminal disclaimer in response to the double patenting rejection on April 27, 2020. The Examiner thereafter issued another notice of allowance, the Applicant thereafter amended the claims to correct "minor antecedent basis errors that would

otherwise be present in claims 10, 11, and 13," and the Examiner again issued a notice of allowance.

3. '966 Patent

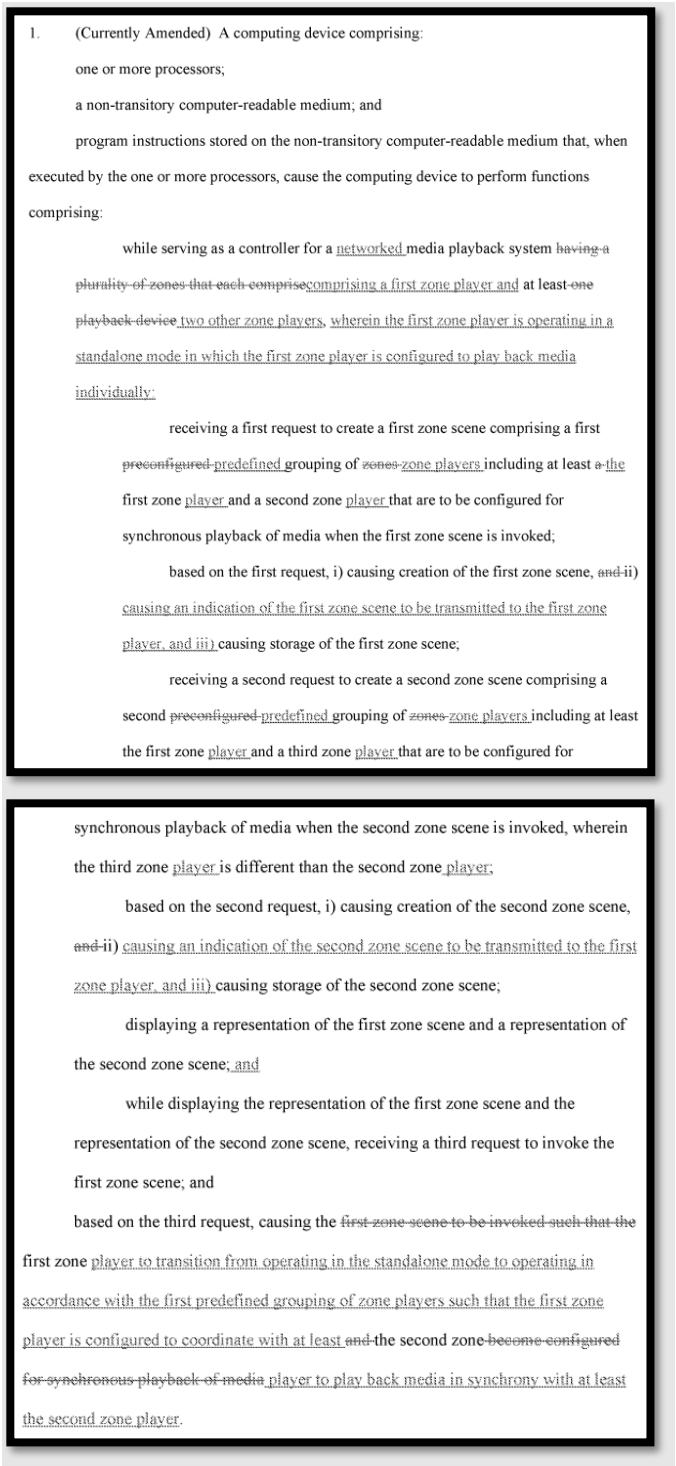
84. I understand that the application underlying the '966 patent was filed on April 12, 2019. On July 5, 2019, the Examiner issued a non-final rejection that is substantially similar to the non-final rejection issued with respect to the '885 patent. For example, the Examiner re-affirmed the position below regarding the DME prior art and the obviousness of the claimed grouping in substantially identical language:

> While DME does not explicitly teach the inclusion, exclusion, etc. of particular enumerated first, second, etc. players of the set of available players to form, create, save, recall etc. a particular first, second, etc. grouping Examiner takes official notice that the grouping and sub-grouping of a constellation of audio players to include or disclude particular players from an operational set was well known in the art before the effective filing date of the instant invention and would have been an obvious inclusion. The DME system enables the practice of the claimed subject matter without undue experimentation and as such grouping of playback device and channels thereon would have been obvious as a matter of routine experimentation over the course of normal operation by the average skilled practitioner upon the DME interface to create, save and recall various configurations including and/or excluding the particular enumerated playback devices.

2019-07-05 Non-Final Rejection.

85. The Applicant issued a similar set of amendments to the specification on August 23, 2019—adding description of Figures 5, 7, and 8.

86. The Applicant's claim amendments were substantially similar to those made during the '885 patent application prosecution as well.



1. (Currently Amended) A computing device comprising:

one or more processors;

a non-transitory computer-readable medium; and

program instructions stored on the non-transitory computer-readable medium that, when executed by the one or more processors, cause the computing device to perform functions comprising:

while serving as a controller for a networked media playback system ~~having a plurality of zones that each comprise~~comprising a first zone player and at least ~~one playback device~~ two other zone players, wherein the first zone player is operating in a standalone mode in which the first zone player is configured to play back media individually:

receiving a first request to create a first zone scene comprising a first ~~preconfigured~~ predefined grouping of ~~zones~~ zone players including at least ~~a~~ the first zone player and a second zone player that are to be configured for synchronous playback of media when the first zone scene is invoked;

based on the first request, i) causing creation of the first zone scene, ~~and~~ ii) causing an indication of the first zone scene to be transmitted to the first zone player, and iii) causing storage of the first zone scene;

receiving a second request to create a second zone scene comprising a second ~~preconfigured~~ predefined grouping of ~~zones~~ zone players including at least the first zone player and a third zone player that are to be configured for synchronous playback of media when the second zone scene is invoked, wherein the third zone player is different than the second zone player;

based on the second request, i) causing creation of the second zone scene, ~~and~~ ii) causing an indication of the second zone scene to be transmitted to the first zone player, and iii) causing storage of the second zone scene;

displaying a representation of the first zone scene and a representation of the second zone scene; and

while displaying the representation of the first zone scene and the representation of the second zone scene, receiving a third request to invoke the first zone scene; and

based on the third request, causing the ~~first zone scene to be invoked such that the~~ first zone player to transition from operating in the standalone mode to operating in accordance with the first predefined grouping of zone players such that the first zone player is configured to coordinate with at least ~~and~~ the second zone ~~become configured for synchronous playback of media~~ player to play back media in synchrony with at least the second zone player.

2. (Currently Amended) The computing device of claim 1, further comprising program instructions stored on the non-transitory computer-readable medium that, when executed by the one or more processors, cause the computing device to perform functions comprising:

while the first zone player is configured to coordinate with at least ~~and~~ the second zone player to play back media in synchrony with at least the second zone player ~~are configured for synchronous playback of media~~, receiving a fourth request to invoke the second zone scene; and

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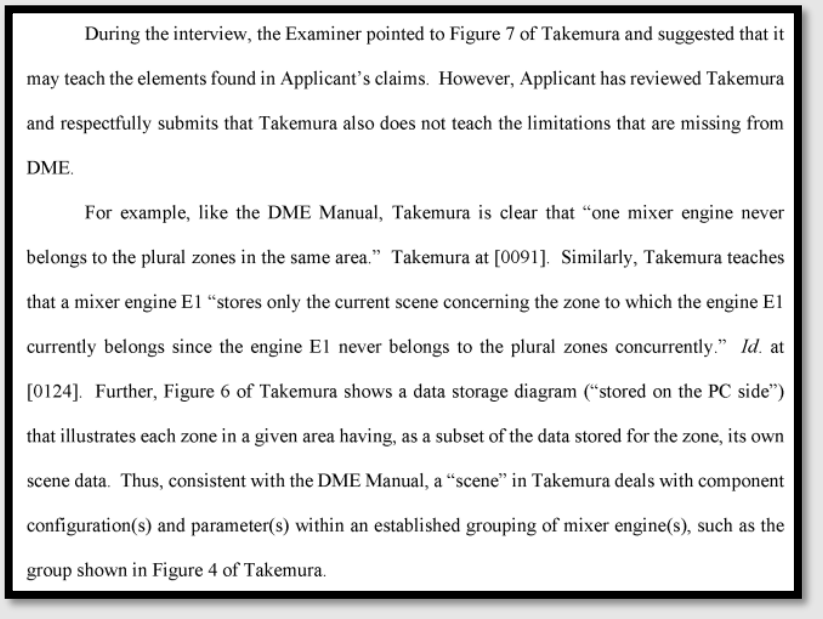
based on the fourth request, causing the first zone player to (a) cease to operate in accordance with the first predefined grouping of zone players such that the first zone player is no longer configured to coordinate with at least the second zone player to play back media in synchrony with at least the second zone player and (b) begin to operate in accordance with the second predefined grouping of zone players ~~second zone scene to be invoked~~ such that the first zone player is configured to coordinate with at least ~~and~~ the third zone ~~become configured for synchronous playback of media while the first zone and the second zone become unconfigured for synchronous playback of media~~ player to play back media in synchrony with at least the third zone player.

Id. at 5-6.

87. The Applicant also distinguished DME and Takemura in identical or nearly identical terms as argued with respect to the ’885 patent application.

Further, the DME Manual states that “it is possible to have multiple Zones in an Area, multiple Device Groups in a Zone, and multiple Scenes and Configurations in a Device Group.” *Id*. at p. 5. Thus, with reference to the hierarchy shown graphically at p. 3, a scene in the context of the DME Manual (a “DME Scene”) is created and applied at the level of a device group.

However, individual devices in the DME system (i.e, individual DME units or SP2060 units) cannot be assigned to multiple device groups or overlapping device groups. “A zone can include up to 32 device groups, and all devices will belong to ***one*** of those groups. Click [Device Group Manager] in the [Tools] menu to open tile ‘Device Group Manager’ window, via which device groups can be changed as required.” *Id*. at p. 281 (emphasis added). Thus, DME Scenes can be configured/stored/recalled within a given DME device group that is already established—but the DME Manual does ***not*** suggest that recalling a DME Scene can re-group individual devices into different DME device groups.



During the interview, the Examiner pointed to Figure 7 of Takemura and suggested that it may teach the elements found in Applicant's claims. However, Applicant has reviewed Takemura and respectfully submits that Takemura also does not teach the limitations that are missing from DME.

For example, like the DME Manual, Takemura is clear that "one mixer engine never belongs to the plural zones in the same area." Takemura at [0091]. Similarly, Takemura teaches that a mixer engine E1 "stores only the current scene concerning the zone to which the engine E1 currently belongs since the engine E1 never belongs to the plural zones concurrently." *Id.* at [0124]. Further, Figure 6 of Takemura shows a data storage diagram ("stored on the PC side") that illustrates each zone in a given area having, as a subset of the data stored for the zone, its own scene data. Thus, consistent with the DME Manual, a "scene" in Takemura deals with component configuration(s) and parameter(s) within an established grouping of mixer engine(s), such as the group shown in Figure 4 of Takemura.

Id. at 17-18.

E. Effective Priority Date

40. The filing date of the '885 patent is April 12, 2019, and the patent claims priority to an earlier application with a priority date of September 11, 2007. I also understand that Sonos has alleged that the '885 patent is entitled to an earlier effective filing date, September 12, 2006. Sonos has also claimed a conception date of December 21, 2005.

88. I discuss Sonos's entitlement to an earlier priority date in Section XI. As described therein, I do not agree that Sonos adequately disclosed the invention or was in possession of the invention at an earlier date. However, the prior art cited in this Report is invalidating even under Sonos's earliest claimed conception date, as described in this Report.

VII. PERSON OF ORDINARY SKILL IN THE ART

89. I understand that the hypothetical person of ordinary skill in the art is presumed to have knowledge of all references that are sufficiently related to one another and to the pertinent art, and to have knowledge of all arts reasonably pertinent to the particular problem that the alleged invention addresses.

I, Dan Schonfeld, declare under penalty of perjury under the laws of the United States that the foregoing is true and correct.

DATED: November 30, 2022

Dan Schonfeld, Ph.D